

Horticulture

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Plant pH Preferences

Due to variations in soil and climate authors do not always agree about the pH preferences of crops, but the following is a range that should be acceptable.

Ornamentals and Houseplants

pH 4.5

Anemone	Iris kaempferi
Autumn Gentains	Mecanopsis
Gentian	

pH 4.5 – 5.5

Aspidistra	Orchid (most)
Azalea	Pachysandra terminalis
Camelia	Parlour palm (Aspidistra)
Columnea	

pH 5.5

Auricaria	Pitcher plant (Nepenthes)
Cactus (most)	Primrose (Primula)
Crassula	Urn plant (Aechmea)
Norfolk Island pine (Auricaria)	

pH 5.5 – 6.0

Amaryllis	Anthurium
Bilbergia	Butterfly flower (Schizanthus)
Calliopsis (Coreopsis)	Christmas cactus (Zygocactus)
Cissus	Clary (Salvia)
Clerodendron	Creeping fig (Ficus pumilla)
Croton	Dracaena
Dumb cane (Difenbachia)	
Flamingo flower (Anthurium)	
Gardenia	Iresine
Kangaroo vine (Cissus)	
Maranta	Monstera
Pandanus	Pepperomia
Philodendron	Phlox
Pick a back (Ptolmeia)	
Prayer plant (Maranta)	
Rubber plant (Ficus)	
Silk oak (Grevillia)	
Swiss cheese plant (Monstera)	
Tradescantia	Zebrina

pH 5.5 – 6.75

Begonia	Clarkia
Chrysanthemum	Cineraria
Flame nettle (Coleus)	Fuchsia
Gloxinia (Sinningia)	Grasses (Agrostis sp)
Lupin	Marigold (Tagetes)
Mother in law tongue (Sanseveria)	
Pansy (Viola)	Poinsettia (Euphorbia)
Sanseveria	
Slipperwort (Calceolaria)	Violet (Viola)

pH 5.5 – 7.5

Cosmos (Cosmea)	
Indian shot (Canna)	
Nasturium (Tropaeolum)	

pH 6.0

Campanula	Clivia
Crassula	Fittonia
Grevillia	Gynura
Hoya (wax flower)	
Michelmas daisy (Aster)	
Neomarcia	Plumbago
Poor man's orchid (Schizanthus)	
Primula	Purslane (Portulaca)
Rose (Rosa)	
Shrimp plant (Dredgerella)	
Snakeskin plant (Fittonia)	
Swainsonia	Tuberose
Waterlily (Nymphea)	

pH 6.0 – 6.5

Alyssum	
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Ornamentals and Houseplants - continued

pH 6.0 – 6.75

African violet (St Paulia)
Baby's breath (Gypsophia)
Bird of paradise (Strelitzia)
Bougainvillea
Busy lizzie (Impatiens)
Candytuft (Iberis)
Coleus
Coral bells (Heuchera)
Cyclamen
Daffodil (Narcissus)
Delphinium
Easter lily (Zantedeschia)
Hollyhock (Althea)
Primrose (Primula)
Red hot poker (Kniphophia)
Salvia
Snapdragon (Antirrhinum)
Spring gentian (Gentiana verna)
Stock (Mathiola)
Tobacco (Nicotiana)
Viola
Zinnia

Burning bush (Kochia)
Calendula
Carnation (Dianthus)
Columbine (Aquilegia)
Dahlia
Gladiolus
Narcissus
Scabious
Sunflower (Helianthus)
Tulip
Wallflower

pH 6.0 – 7.5

Ageratum
Feverfew (Chrysanth)
Iris
Ladys slipper orchid (Cypripedium & Paphiopedilum)
Lillies (Lilium)
Petunia

Avens (Geum)
Impatiens
Lobelia
Verbena

pH 6.75

Aster
Bachelor's buttons (Ranunculus)
Bearded Iris
Bleeding heart (Dicentra)
Cockscombe (Celosia)
Coconut palm (Cocos)
Daisy (Bellus)
Foxglove (Digitalis)
Gerbra
Larkspur (Delphinium)
Oleander (Nerium)
Polemonium (Jacobs Ladder)
Pyrethrum

Euphorbia
Freesia
Godetia
Marigold (Calendula)
Orange (Citrus)
Portulaca
Spurge (Euphorbia)

pH 6.75 - 7.5

Annual Phlox
Bluebell (Scilla)
Crocus
Fern, maidenhair (Adiantum)
Forget me not (Myosotis)
Geranium (Pelargonium)
Hyacinth
Iceland poppy (Papaver)
Lily madonna (Lilium candidum)
Love lies bleeding
Oxalis
Pepper (Capsicum)
Pink (Dianthus)
Snowdrop (Galanthus)
Star of Bethlehem (Campanula)
Sweet pea (Lathyrus)
Sweet William (Dianthus)

Asparagus fern
Cherry pie (Heliotrope)
Day lily (Hemerocallis)
Flax (Linum)
Morning glory (Ipomea)
Pelargonium
Peony
Poppy (Papaver)

Trees and Shrubs

pH 4.5

Bilberry (*Vaccinium*)
 Chilean pernettya (*Pernettya*)
 Flame of the forest (*Pieris*)
 Hydrangea (Blue) Ledum
 London season (*Zenobia*) Phyllodoce
 Pin oak (*Quercus palustris*) – tree
 Sweet gum (*Liquidamber*) - tree

pH 4.5 – 5.25

Azalea Camelia
 Rhododendron

pH 4.5 – 6.0

Heather (*Erica*) Magnolia - tree

pH 5.25

Conifers (most) - tree Pine (*Pinus*) - tree

pH 5.25 – 6.0

American Laurel (*Kalmia*) Arucaria - tree
 Birch (*Betula*) – tree Boronia
 Californian lilac (*Ceanothus*) Cinquefoil (*Potentilla*)
 Dogwood (*Cornus*) Hemlock (*Tsuga*) - tree
 Leucothoe
 Leptospermum (Tea tree) Photina
 Rosemary (*Rosmarinus*) Snowbells (*Stryax*)
 Strawberry tree (*Arbutus*) – tree
 Sweet fern (*Comptonia*)
 Wintergreen (*Gaultheria*)

pH 5.25 – 6.75

Holly (*Ilex*) - tree

pH 5.25 – 7.5

Crab (*Malus*) - tree

pH 6.0

Balsam fir (*Abies*) - tree
 Juniper (*Juniperus*) - tree
 Monkey puzzle (*Auricaria*) – tree

pH 6.0 – 6.75

Almond (*Prunus*) – tree Antler tree (*Rhus*) - tree
 Apple (*Malus*) - tree Ash (*Fraxinus*) - tree
 Fuchsia
 Hawthorn (*Cretagus*) - tree Hydrangea (Pink)
 Lavender (*Lavendula*)
 Passion flower (*Passiflora*)
 Pear (*Pyrus*) - tree Plum (*Prunus*) – tree
 Privet (*Ligustrum*)
 Rose (*Rosa*) Quince (*Chaenomeles*)
 Yew (*Taxus*)

pH 6.0 – 7.5

Clematis
 Currant, flowering (*Ribes*)
 Daphne
 Forsythia
 Jasmine (*Jasminum*)
 Laurel (*Prunus laurocerasus*)
 Lilac (*Syringa*) - tree
 Mulberry (*Morus*) - tree
 Rock rose (*Cistus*)
 Stags horn (*Rhus*) - tree
 Vine (*Vitis*)
 Witch hazel (*Hamamelis mollis*)

pH 6.75

Box (*Buxus*)
 Douglas fir (*Pseudotsuga*) - tree
 Genista Hibiscus
 Rose of Sharon (*Hypericum*)

pH 6.75 - 7.5

Abele (<i>Populus alba</i>) – tree	Acacia - tree
Adam's needle (<i>Yucca</i>)	Barberry (<i>Berberis</i>)
Arbor vitae (<i>Thuja</i>) – tree	
Blackcurrant (<i>Ribes</i>)	
Boston Ivy (<i>Parthenocissus</i>)	
Bridal wreath (<i>Spirea arguta</i>)	
Butterfly bush (<i>Buddleia</i>)	Cherry (<i>Prunus</i>) – tree
Cotoneaster	Deutzia
Diervilla (<i>Wygelia</i>)	Escallonia
Euonymus	Firethorn (<i>Pyracantha</i>)
Golden bells (<i>Forsythia</i>)	
Golden Rain (<i>Laburnum</i>) – tree	
Guelder rose (<i>Viburnum</i>)	Honeysuckle (<i>Lonicera</i>)
Hydrangea (white)	Ivy (<i>Hedera</i>)
Japonica (<i>Caesalpina</i>)	Jews mallow (<i>Kerria</i>)
Maple (<i>Acer</i>) – tree	
Mock orange (<i>Philadelphus</i>)	Myrtle (<i>Myrtus</i>)
Peach (<i>Pumus persica</i>)	Rose mallow (<i>Hibiscus</i>)
Spanish gorse (<i>Genista</i>)	Spirea
St. John's wort (<i>Hypericum</i>)	
White poplar (<i>Poplus alba</i>) – tree	
Wisteria	

Vegetables, Fruit, Herbs, and Food Plants

pH 4.5 – 5.25

Bilberry	Cranberry
<u>pH 5.25 – 6.0</u>	
Blackberry	Chicory
Gooseberry	Pineapple
Potato	Rosemary
Sage	Strawberry
<u>pH 5.25 – 6.75</u>	
Apples	Rhubarb
<u>pH 6.0</u>	
Aubergine	Eggplant
Rye	

pH 6.0 – 6.75

Almond	Bean, broad
Bean, climbing	Bean, runner
Brussels sprouts	Carrots
Climbing bean	Courgette
Endive	Kale
Lemon	Lentil
Marrow	Olives
Parsley	Pear
Pumpkin	Raspberry
Shallots	Soyabean
Squash	Swede
Thyme	Watermelon

pH 6.0 – 7.5

Bean, French	Broccoli
Cabbage	Capsicum
Cauliflower	Celery
Cherries	Chives
Corn	Cucumber
Currants	Garlic
Horseradish	Lettuce
Mulberry	Mustard
Onions	Parsnip
Peach	Peas
Peppers	Plum
Radish	Sweet corn
Tomato	Turnips
<u>pH 6.75</u>	
Bean, lima	Cantaloupe, melon
Kohl rabi	Orange
Quince	Salsify
Scorzonera	Swiss chard

pH 6.75 - 7.5

Alfalfa	Artichoke, Jerusalem
Asparagus	Avocado
Barley	Beet, sugar
Beetroot	Grape vine
Leek	Mushroom
Pecan	Spinach
Watercress	



Extension Service

West Virginia University